

n/a

CRF Error Corrected by the STIC System Branch

Serial Number:

09/051,685

CRF Processing Date:

Edited by:

Verified by: (STIC staff)

1693  
10/21/98

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically:
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☒ Deleted extra, invalid, headings used by an applicant, specifically:  
"RELATED" instead of PRIOR
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/25/98  
TIME: 16:09:07

INPUT SET: S29297.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

ENTERED

## SEQUENCE LISTING

## (1) General Information:

(i) APPLICANT: University of Nebraska Board of Regents

(ii) TITLE OF INVENTION: Compositions and Methods for Enhancing  
Immune Responses Mediated by Antigen-Presenting Cells

(iii) NUMBER OF SEQUENCES: 11

## (iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Dann, Dorfman, Herrell and Skillman

(B) STREET: 1601 Market Street Suite 720

(C) CITY: Philadelphia

(D) STATE: PA

(E) COUNTRY: USA

(F) ZIP: 19103-2307

## (v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

## (vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 09/051,685

(B) FILING DATE: 17-APRIL-1998

(C) CLASSIFICATION:

## (vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: PCT US96/16825

(B) FILING DATE: 18-OCT-1996

## (vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 60/005,727

(B) FILING DATE: 20-OCT-1995

## (viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Reed, Janet E.

(B) REGISTRATION NUMBER: 36,252

(C) REFERENCE/DOCKET NUMBER: UNMC 63102US

## (ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (215) 563-4100

(B) TELEFAX: (215) 563-4044

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/25/98  
TIME: 16:09:09

INPUT SET: S29297.raw

47  
48  
49 (2) INFORMATION FOR SEQ ID NO:1:  
50  
51 (i) SEQUENCE CHARACTERISTICS:  
52 (A) LENGTH: 10 amino acids  
53 (B) TYPE: amino acid  
54 (C) STRANDEDNESS: Not Relevant  
55 (D) TOPOLOGY: Not Relevant  
56  
57 (ii) MOLECULE TYPE: peptide  
58  
59 (iii) HYPOTHETICAL: NO  
60  
61 (iv) ANTI-SENSE: NO  
62  
63  
64 (ix) FEATURE:  
65 (A) NAME/KEY: Modified-site  
66 (B) LOCATION: 9  
67 (D) OTHER INFORMATION: /note= "The alanine in position 9 is a  
68 D-amino acid."  
69  
70  
71 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:  
72  
73 Tyr Ser Phe Lys Pro Met Pro Leu Ala Arg  
74 1 5 10  
75  
76 (2) INFORMATION FOR SEQ ID NO:2:  
77  
78 (i) SEQUENCE CHARACTERISTICS:  
79 (A) LENGTH: 19 amino acids  
80 (B) TYPE: amino acid  
81 (C) STRANDEDNESS: Not Relevant  
82 (D) TOPOLOGY: Not Relevant  
83  
84 (ii) MOLECULE TYPE: peptide  
85  
86 (iii) HYPOTHETICAL: NO  
87  
88 (iv) ANTI-SENSE: NO  
89  
90  
91 (ix) FEATURE:  
92 (A) NAME/KEY: Modified-site  
93 (B) LOCATION: 18  
94 (D) OTHER INFORMATION: /note= "The alanine in the 18th  
95 position is a D-amino acid."  
96  
97  
98 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:  
99

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PATENT APPLICATION US/09/051,685DATE: 10/25/98  
TIME: 16:09:10

INPUT SET: S29297.raw

100 Tyr Lys Gln Gly Gly Phe Leu Gly Leu Tyr Ser Phe Lys Pro Met Pro  
101 1 5 10 15  
102

103 Leu Ala Arg  
104  
105  
106  
107

## 108 (2) INFORMATION FOR SEQ ID NO:3:

109  
110 (i) SEQUENCE CHARACTERISTICS:  
111 (A) LENGTH: 39 amino acids  
112 (B) TYPE: amino acid  
113 (C) STRANDEDNESS: Not Relevant  
114 (D) TOPOLOGY: Not Relevant  
115

116 (ii) MOLECULE TYPE: peptide  
117

118 (iii) HYPOTHETICAL: NO  
119

120 (iv) ANTI-SENSE: NO  
121  
122  
123  
124

## 125 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

126  
127 His Gly Thr Val Ile Glu Ser Leu Glu Ser Leu Asn Asn Tyr Phe Asn  
128 1 5 10 15  
129

130 Phe Phe Gly Ile Asp Val Glu Glu Lys Ser Leu Phe Leu Asp Ile Trp  
131 20 25 30  
132

133 Arg Asn Trp Gln Lys Asp Gly  
134 35  
135  
136  
137

## 138 (2) INFORMATION FOR SEQ ID NO:4:

139  
140 (i) SEQUENCE CHARACTERISTICS:  
141 (A) LENGTH: 39 amino acids  
142 (B) TYPE: amino acid  
143 (C) STRANDEDNESS: Not Relevant  
144 (D) TOPOLOGY: Not Relevant  
145

146 (ii) MOLECULE TYPE: peptide  
147

148 (iii) HYPOTHETICAL: NO  
149

150 (iv) ANTI-SENSE: NO  
151  
152

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/25/98  
TIME: 16:09:12

INPUT SET: S29297.raw

153

154

155 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

156

157 Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys Tyr Phe Asn

158 1 5 10 15

159

160 Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe Leu Gly Ile

161 20 25 30

162

163 Leu Lys Asn Trp Lys Glu Glu

164 35

165

166

167

168 (2) INFORMATION FOR SEQ ID NO:5:

169

170 (i) SEQUENCE CHARACTERISTICS:

171 (A) LENGTH: 19 amino acids

172 (B) TYPE: amino acid

173 (C) STRANDEDNESS: Not Relevant

174 (D) TOPOLOGY: Not Relevant

175

176 (ii) MOLECULE TYPE: peptide

177

178 (iii) HYPOTHETICAL: NO

179

180 (iv) ANTI-SENSE: NO

181

182

183 (ix) FEATURE:

184 (A) NAME/KEY: Modified-site

185 (B) LOCATION: 9

186 (D) OTHER INFORMATION: /note= "The alanine in position 9 is a

187 D-amino acid."

188

189

190

191

192 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

193

194 Tyr Ser Phe Lys Pro Met Pro Leu Ala Arg Tyr Lys Gln Gly Gly Phe

195 1 5 10 15

196

197 Leu Gly Leu

198

199

200

201 (2) INFORMATION FOR SEQ ID NO:6:

202

203 (i) SEQUENCE CHARACTERISTICS:

204 (A) LENGTH: 9 amino acids

205 (B) TYPE: amino acid

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/25/98  
TIME: 16:09:13

INPUT SET: S29297.raw

206 (C) STRANDEDNESS: Not Relevant  
207 (D) TOPOLOGY: Not Relevant  
208  
209 (ii) MOLECULE TYPE: peptide  
210  
211 (iii) HYPOTHETICAL: NO  
212  
213 (iv) ANTI-SENSE: NO  
214  
215  
216  
217  
218 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:  
219  
220 Tyr Lys Gln Gly Gly Phe Leu Gly Leu  
221 1 5  
222  
223  
224  
225  
226 (2) INFORMATION FOR SEQ ID NO:7:  
227  
228 (i) SEQUENCE CHARACTERISTICS:  
229 (A) LENGTH: 20 amino acids  
230 (B) TYPE: amino acid  
231 (C) STRANDEDNESS: Not Relevant  
232 (D) TOPOLOGY: Not Relevant  
233  
234 (ii) MOLECULE TYPE: peptide  
235  
236 (iii) HYPOTHETICAL: NO  
237  
238 (iv) ANTI-SENSE: NO  
239  
240  
241  
242  
243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:  
244  
245 Gly Val Thr Ser Ala Pro Asp Thr Arg Arg Ala Pro Gly Ser Thr Ala  
246 1 5 10 15  
247  
248 Pro Pro Ala His  
249 20  
250  
251  
252  
253 (2) INFORMATION FOR SEQ ID NO:8:  
254  
255 (i) SEQUENCE CHARACTERISTICS:  
256 (A) LENGTH: 12 amino acids  
257 (B) TYPE: amino acid  
258 (C) STRANDEDNESS: Not Relevant

PAGE: 1

**SEQUENCE VERIFICATION REPORT**  
PATENT APPLICATION *US/09/051,685*

DATE: 10/25/98  
TIME: 16:09:15

*INPUT SET: S29297.raw*

Line	Error	Original Text
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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/21/98  
TIME: 14:34:48

INPUT SET: S29297.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

Does Not Comply  
Corrected Diskette Needed

## SEQUENCE LISTING

## (1) General Information:

(i) APPLICANT: University of Nebraska Board of Regents

(ii) TITLE OF INVENTION: Compositions and Methods for Enhancing  
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(A) ADDRESSEE: Dann, Dorfman, Herrell and Skillman

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(C) CITY: Philadelphia

(D) STATE: PA

(E) COUNTRY: USA

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## (v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

## (vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 09/051,685

(B) FILING DATE: 17-APRIL-1998

(C) CLASSIFICATION:

*Prior*  
(vii) ~~RELATED~~ APPLICATION DATA:

(A) APPLICATION NUMBER: PCT US96/16825

(B) FILING DATE: 18-OCT-1996

*Prior*  
(vii) ~~RELATED~~ APPLICATION DATA:

(A) APPLICATION NUMBER: 60/005,727

(B) FILING DATE: 20-OCT-1995

## (viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Reed, Janet E.

(B) REGISTRATION NUMBER: 36,252

(C) REFERENCE/DOCKET NUMBER: UNMC 63102US

## (ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (215) 563-4100

(B) TELEFAX: (215) 563-4044



RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/21/98  
TIME: 14:34:49

INPUT SET: S29297.raw

47  
48  
49 (2) INFORMATION FOR SEQ ID NO:1:  
50  
51 (i) SEQUENCE CHARACTERISTICS:  
52 (A) LENGTH: 10 amino acids  
53 (B) TYPE: amino acid  
54 (C) STRANDEDNESS: Not Relevant  
55 (D) TOPOLOGY: Not Relevant  
56  
57 (ii) MOLECULE TYPE: peptide  
58  
59 (iii) HYPOTHETICAL: NO  
60  
61 (iv) ANTI-SENSE: NO  
62  
63  
64 (ix) FEATURE:  
65 (A) NAME/KEY: Modified-site  
66 (B) LOCATION: 9  
67 (D) OTHER INFORMATION: /note= "The alanine in position 9 is a  
68 D-amino acid."  
69  
70  
71 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:  
72  
73 Tyr Ser Phe Lys Pro Met Pro Leu Ala Arg  
74 1 5 10  
75  
76 (2) INFORMATION FOR SEQ ID NO:2:  
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78 (i) SEQUENCE CHARACTERISTICS:  
79 (A) LENGTH: 19 amino acids  
80 (B) TYPE: amino acid  
81 (C) STRANDEDNESS: Not Relevant  
82 (D) TOPOLOGY: Not Relevant  
83  
84 (ii) MOLECULE TYPE: peptide  
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86 (iii) HYPOTHETICAL: NO  
87  
88 (iv) ANTI-SENSE: NO  
89  
90  
91 (ix) FEATURE:  
92 (A) NAME/KEY: Modified-site  
93 (B) LOCATION: 18  
94 (D) OTHER INFORMATION: /note= "The alanine in the 18th  
95 position is a D-amino acid."  
96  
97  
98 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:  
99

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/21/98  
TIME: 14:34:50

INPUT SET: S29297.raw

100 Tyr Lys Gln Gly Gly Phe Leu Gly Leu Tyr Ser Phe Lys Pro Met Pro  
101 1 5 10 15  
102  
103 Leu Ala Arg  
104  
105  
106  
107

## (2) INFORMATION FOR SEQ ID NO:3:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 39 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: Not Relevant  
(D) TOPOLOGY: Not Relevant

(ii) MOLECULE TYPE: peptide

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

His Gly Thr Val Ile Glu Ser Leu Glu Ser Leu Asn Asn Tyr Phe Asn  
1 5 10 15  
Phe Phe Gly Ile Asp Val Glu Glu Lys Ser Leu Phe Leu Asp Ile Trp  
20 25 30  
Arg Asn Trp Gln Lys Asp Gly  
35

## (2) INFORMATION FOR SEQ ID NO:4:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 39 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: Not Relevant  
(D) TOPOLOGY: Not Relevant

(ii) MOLECULE TYPE: peptide

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/21/98  
TIME: 14:34:51

INPUT SET: S29297.raw

153

154

155 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

156

157 Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys Tyr Phe Asn

158 1 5 10 15

159

160 Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe Leu Gly Ile

161 20 25 30

162

163 Leu Lys Asn Trp Lys Glu Glu

164 35

165

166

167

168 (2) INFORMATION FOR SEQ ID NO:5:

169

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174 (D) TOPOLOGY: Not Relevant

175

176 (ii) MOLECULE TYPE: peptide

177

178 (iii) HYPOTHETICAL: NO

179

180 (iv) ANTI-SENSE: NO

181

182

183 (ix) FEATURE:

184 (A) NAME/KEY: Modified-site

185 (B) LOCATION: 9

186 (D) OTHER INFORMATION: /note= "The alanine in position 9 is a

187 D-amino acid."

188

189

190

191

192 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

193

194 Tyr Ser Phe Lys Pro Met Pro Leu Ala Arg Tyr Lys Gln Gly Gly Phe

195 1 5 10 15

196

197 Leu Gly Leu

198

199

200

201 (2) INFORMATION FOR SEQ ID NO:6:

202

203 (i) SEQUENCE CHARACTERISTICS:

204 (A) LENGTH: 9 amino acids

205 (B) TYPE: amino acid

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/051,685DATE: 10/21/98  
TIME: 14:34:52

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206 (C) STRANDEDNESS: Not Relevant  
207 (D) TOPOLOGY: Not Relevant  
208

209 (ii) MOLECULE TYPE: peptide  
210

211 (iii) HYPOTHETICAL: NO  
212

213 (iv) ANTI-SENSE: NO  
214  
215  
216  
217

218 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:  
219

220 Tyr Lys Gln Gly Gly Phe Leu Gly Leu  
221 1 5  
222  
223  
224  
225

226 (2) INFORMATION FOR SEQ ID NO:7:  
227

228 (i) SEQUENCE CHARACTERISTICS:  
229 (A) LENGTH: 20 amino acids  
230 (B) TYPE: amino acid  
231 (C) STRANDEDNESS: Not Relevant  
232 (D) TOPOLOGY: Not Relevant  
233

234 (ii) MOLECULE TYPE: peptide  
235

236 (iii) HYPOTHETICAL: NO  
237

238 (iv) ANTI-SENSE: NO  
239  
240  
241  
242

243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:  
244

245 Gly Val Thr Ser Ala Pro Asp Thr Arg Arg Ala Pro Gly Ser Thr Ala  
246 1 5 10 15  
247

248 Pro Pro Ala His  
249 20  
250  
251  
252

253 (2) INFORMATION FOR SEQ ID NO:8:  
254

255 (i) SEQUENCE CHARACTERISTICS:  
256 (A) LENGTH: 12 amino acids  
257 (B) TYPE: amino acid  
258 (C) STRANDEDNESS: Not Relevant

**SEQUENCE VERIFICATION REPORT**  
**PATENT APPLICATION US/09/051,685**DATE: 10/21/98  
TIME: 14:34:53*INPUT SET: S29297.raw*

Line	Error	Original Text
31	Unknown or Misplaced Identifier	(vii) RELATED APPLICATION DATA:
32	Wrong application Serial Number	(A) APPLICATION NUMBER: PCT US96/16825
35	Unknown or Misplaced Identifier	(vii) RELATED APPLICATION DATA:
36	Wrong application Serial Number	(A) APPLICATION NUMBER: 60/005,727